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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,015	03/12/2001	J. Robert Prough	10-1335	7363

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EXAMINER	
HALPERN, MARK	

ART UNIT	PAPER NUMBER
1731	

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/803,015	PROUGH ET AL.	
	Examiner	Art Unit	
	Mark Halpern	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15 and 24-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 24-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1) Acknowledgement is made of preliminary Amendment received 7/21/2003. Applicants cancel claims 16-23, and offer new claims 24-29, for consideration.

Specification

2) Cross-Reference to Related Applications should indicate that this application is a divisional of 09/568,984, filed 5/11/2000, now patent U.S. 6,325,890.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3) Claims 1-9, 24-29, are rejected under 35 U.S.C. 102(a) as anticipated by Prough (5,476,572).

Claims 1-2: In view that the independent claim recites a system that discloses means plus function, the claim is rejected under 35 U.S.C. 102(a) as anticipated by Prough, when considering the system as an apparatus. Prough discloses an apparatus structure which takes in comminuted cellulosic fibrous material, such as wood chips, and turns it into a chips slurry for delivery to digester 11. The comminuted cellulosic fibrous material is first placed in a cylindrical bin 12 equipped with an air lock on top of the bin and a chip meter 14 below the bin. Connected to the bin, and located below it, is a horizontal steaming vessel 15. The vessel 15 in turn is connected to vertical vessel 16, which is a chip chute. The vertical vessel 16 has an inlet above and an outlet below. Located under vessel 16 and connected to said vessel 16 is a high pressure transfer device equipped with high pressure pump 22 that pumps a slurry from the pump outlet to digester 11 via line 21'. The pump 22 has an inlet that receives back liquid supplied by the high pressure slurry pump through the top of the digester via a return line (col. 5, line 60 to col. 6, line 34, and Figures 1, 2). Prough's cylindrical bin 12, reads on the present steaming vessel; Prough's vertical vessel 16 reads on the present superatmospheric pressure vertical treatment vessel; Prough's pump 22 and the associated piping, read on the present pressuring transfer means consisting of one or more high pressure slurry pumps and means for circulating liquid back to the pump inlet.

Claims 3-9: a heat exchanger for cooling or heating in the circulation loop is disclosed in Figure 8 and is provided in order to avoid water hammer as disclosed by

Prough (col. 2, lines 28-45, col. 7, line 42 to col. 8, line 44, and Figure 8). Slurrying vessel reads on vessels 15,16.

Claim 24: chip chute vessel 16 is disclosed in Figure 1.

Claim 25: coking liquor lines 28, 32, are disclosed in Figure 1.

Claims 26-29: chip chute operating under pressurized conditions is a method and not a structural limitation.

4) Claims 1-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Prough.

Claims 1-2: In view that the independent claim recites a system that discloses means plus function, the claim is rejected under 35 U.S.C. 103(a) as obvious over Prough, when considering the system as a process. Prough discloses a process which takes in comminuted cellulosic fibrous material, such as wood chips, and turns it into a chips slurry for delivery to digester 11. The comminuted cellulosic fibrous material is first placed in a cylindrical bin 12 equipped with an air lock on top of the bin and a chip meter 14 below the bin. It would have been obvious to the artisan that the comminuted cellulosic fibrous material is steamed in the bin 12, since low pressure steam enters said bin. Connected to the bin, and located below it, is a horizontal steaming vessel 15. The vessel 15 in turn is connected to vertical vessel 16, which is a chip chute. The vertical vessel 16 has an inlet above and an outlet below. It would have been obvious to the artisan that the vertical vessel 16 is under superatmospheric pressure since it is connected with the horizontal steaming vessel 15. Located under vessel 16 and connected to said vessel 16 is a high pressure transfer device equipped with high

pressure pump 22 that pumps a slurry from the pump outlet to digester 11 via line 21'. The pump 22 has an inlet that receives back liquid supplied by the high pressure slurry pump through the top of the digester via a return line (col. 5, line 60 to col. 6, line 34, and Figures 1, 2). Prough's pump 22 and the associated piping, read on the present pressuring transfer means consisting of one or more high pressure slurry pumps and means for circulating liquid back to the pump inlet.

Claims 3-9: a heat exchanger for cooling or heating in the circulation loop is disclosed in Figure 8 and is provided in order to avoid water hammer as disclosed by Prough (col. 2, lines 28-45, col. 7, line 42 to col. 8, line 44, and Figure 8). Slurrying vessel reads on vessels 15,16.

Claims 10-11, 13-15; it would have been obvious that the installation of Prough include a number of slurry pumps as needed, depending on the distance and height the slurry has to travel to the inlet of the digester, and to reduce wear and tear on an operating pump or to remove a pump from operation to perform routine maintenance.

Claim 12: it would have been obvious that the installation include valves in the line leading to the digester and in the circulation line since it is standard practice in the industry to bypass lines by valving in order to perform routine maintenance.

Conclusion

5) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Halpern

Mark Halpern
Patent Examiner
Art Unit 1731